



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 223364 Report

This analysis was run 03/28/25 on database version 593.

Pham number 223364 has 27 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Alsfro\_82
- Track 2 : Museum\_75, Crispicious1\_70, PacerPaul\_80, Manatee\_73, Arcanine\_79, Bircsak\_76, Makemake\_78, Peterson\_74, SkiPole\_84, Turj99\_71, Magnito\_74, Switzer\_74, Norz\_71
- Track 3 : PhrostyMug\_77
- Track 4 : Bigfoot\_70
- Track 5 : Petruchio\_75, Gyzlar\_68, Maroc7\_77
- Track 6 : Smairt\_79
- Track 7 : HanShotFirst\_73
- Track 8 : Trouble\_75
- Track 9 : Kenmech\_77
- Track 10 : Abrogate\_720
- Track 11 : SarFire\_79, Thor\_79
- Track 12 : Chanagan\_72

### ***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 3, it was called in 27 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abrogate\_720, Alsfro\_82, Arcanine\_79, Bigfoot\_70, Bircsak\_76, Chanagan\_72, Crispicious1\_70, Gyzlar\_68, HanShotFirst\_73, Kenmech\_77, Magnito\_74, Makemake\_78, Manatee\_73, Maroc7\_77, Museum\_75, Norz\_71, PacerPaul\_80, Peterson\_74, Petruchio\_75, PhrostyMug\_77, SarFire\_79, SkiPole\_84, Smairt\_79, Switzer\_74, Thor\_79, Trouble\_75, Turj99\_71,

Genes that have the "Most Annotated" start but do not call it:

- 

Genes that do not have the "Most Annotated" start:

- 

### **Summary by start number:**

### Start 3:

- Found in 27 of 27 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 27 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abrogate\_720 (A1), Alsfro\_82 (A1), Arcanine\_79 (A1), Bigfoot\_70 (A1), Bircsak\_76 (A1), Chanagan\_72 (A1), Crispicous1\_70 (A1), Gyzlar\_68 (A1), HanShotFirst\_73 (A1), Kenmech\_77 (A1), Magnito\_74 (A1), Makemake\_78 (A1), Manatee\_73 (A1), Maroc7\_77 (A1), Museum\_75 (A1), Norz\_71 (A1), PacerPaul\_80 (A1), Peterson\_74 (A1), Petruchio\_75 (A1), PhrostyMug\_77 (A1), SarFire\_79 (A1), SkiPole\_84 (A1), Smairt\_79 (A1), Switzer\_74 (A1), Thor\_79 (A1), Trouble\_75 (A1), Turj99\_71 (A1),

### Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- Start number 3 was manually annotated 27 times for cluster A1.

### Gene Information:

Gene: Abrogate\_720 Start: 46995, Stop: 46309, Start Num: 3

Candidate Starts for Abrogate\_720:

(1, 47301), (2, 47205), (Start: 3 @46995 has 27 MA's), (5, 46962), (7, 46878), (8, 46821), (9, 46779), (10, 46728), (11, 46719), (12, 46671), (15, 46548), (16, 46506), (19, 46320),

Gene: Alsfro\_82 Start: 47015, Stop: 46329, Start Num: 3

Candidate Starts for Alsfro\_82:

(Start: 3 @47015 has 27 MA's), (5, 46982), (7, 46898), (8, 46841), (9, 46799), (10, 46748), (11, 46739), (12, 46691), (14, 46589), (15, 46568), (16, 46526), (19, 46340),

Gene: Arcanine\_79 Start: 48385, Stop: 47699, Start Num: 3

Candidate Starts for Arcanine\_79:

(Start: 3 @48385 has 27 MA's), (5, 48352), (7, 48268), (8, 48211), (9, 48169), (10, 48118), (11, 48109), (12, 48061), (15, 47938), (16, 47896), (19, 47710),

Gene: Bigfoot\_70 Start: 46517, Stop: 45807, Start Num: 3

Candidate Starts for Bigfoot\_70:

(Start: 3 @46517 has 27 MA's), (4, 46499), (5, 46484), (7, 46400), (8, 46343), (9, 46301), (10, 46250), (11, 46241), (12, 46193), (13, 46151), (15, 46070), (16, 46028), (17, 45950),

Gene: Bircsak\_76 Start: 49112, Stop: 48426, Start Num: 3

Candidate Starts for Bircsak\_76:

(Start: 3 @49112 has 27 MA's), (5, 49079), (7, 48995), (8, 48938), (9, 48896), (10, 48845), (11, 48836), (12, 48788), (15, 48665), (16, 48623), (19, 48437),

Gene: Chanagan\_72 Start: 44969, Stop: 44283, Start Num: 3

Candidate Starts for Chanagan\_72:

(Start: 3 @44969 has 27 MA's), (4, 44951), (5, 44936), (7, 44852), (8, 44795), (9, 44753), (10, 44702), (11, 44693), (12, 44645), (14, 44543), (15, 44522), (16, 44480), (18, 44336), (19, 44294),

Gene: Crispicious1\_70 Start: 44651, Stop: 43965, Start Num: 3

Candidate Starts for Crispicious1\_70:

(Start: 3 @44651 has 27 MA's), (5, 44618), (7, 44534), (8, 44477), (9, 44435), (10, 44384), (11, 44375), (12, 44327), (15, 44204), (16, 44162), (19, 43976),

Gene: Gyzlar\_68 Start: 43426, Stop: 42740, Start Num: 3

Candidate Starts for Gyzlar\_68:

(Start: 3 @43426 has 27 MA's), (5, 43393), (7, 43309), (8, 43252), (9, 43210), (10, 43159), (11, 43150), (12, 43102), (13, 43060), (15, 42979), (16, 42937), (19, 42751),

Gene: HanShotFirst\_73 Start: 47020, Stop: 46334, Start Num: 3

Candidate Starts for HanShotFirst\_73:

(Start: 3 @47020 has 27 MA's), (4, 47002), (5, 46987), (7, 46903), (8, 46846), (9, 46804), (10, 46753), (11, 46744), (12, 46696), (15, 46573), (16, 46531), (19, 46345),

Gene: Kenmech\_77 Start: 47527, Stop: 46841, Start Num: 3

Candidate Starts for Kenmech\_77:

(Start: 3 @47527 has 27 MA's), (5, 47494), (7, 47410), (8, 47353), (9, 47311), (10, 47260), (11, 47251), (12, 47203), (15, 47080), (16, 47038), (18, 46894), (19, 46852),

Gene: Magnito\_74 Start: 45855, Stop: 45169, Start Num: 3

Candidate Starts for Magnito\_74:

(Start: 3 @45855 has 27 MA's), (5, 45822), (7, 45738), (8, 45681), (9, 45639), (10, 45588), (11, 45579), (12, 45531), (15, 45408), (16, 45366), (19, 45180),

Gene: Makemake\_78 Start: 47465, Stop: 46779, Start Num: 3

Candidate Starts for Makemake\_78:

(Start: 3 @47465 has 27 MA's), (5, 47432), (7, 47348), (8, 47291), (9, 47249), (10, 47198), (11, 47189), (12, 47141), (15, 47018), (16, 46976), (19, 46790),

Gene: Manatee\_73 Start: 45395, Stop: 44709, Start Num: 3

Candidate Starts for Manatee\_73:

(Start: 3 @45395 has 27 MA's), (5, 45362), (7, 45278), (8, 45221), (9, 45179), (10, 45128), (11, 45119), (12, 45071), (15, 44948), (16, 44906), (19, 44720),

Gene: Maroc7\_77 Start: 48458, Stop: 47772, Start Num: 3

Candidate Starts for Maroc7\_77:

(Start: 3 @48458 has 27 MA's), (5, 48425), (7, 48341), (8, 48284), (9, 48242), (10, 48191), (11, 48182), (12, 48134), (13, 48092), (15, 48011), (16, 47969), (19, 47783),

Gene: Museum\_75 Start: 47134, Stop: 46448, Start Num: 3

Candidate Starts for Museum\_75:

(Start: 3 @47134 has 27 MA's), (5, 47101), (7, 47017), (8, 46960), (9, 46918), (10, 46867), (11, 46858), (12, 46810), (15, 46687), (16, 46645), (19, 46459),

Gene: Norz\_71 Start: 47607, Stop: 46921, Start Num: 3

Candidate Starts for Norz\_71:

(Start: 3 @47607 has 27 MA's), (5, 47574), (7, 47490), (8, 47433), (9, 47391), (10, 47340), (11, 47331), (12, 47283), (15, 47160), (16, 47118), (19, 46932),

Gene: PacerPaul\_80 Start: 48480, Stop: 47794, Start Num: 3

Candidate Starts for PacerPaul\_80:

(Start: 3 @48480 has 27 MA's), (5, 48447), (7, 48363), (8, 48306), (9, 48264), (10, 48213), (11, 48204), (12, 48156), (15, 48033), (16, 47991), (19, 47805),

Gene: Peterson\_74 Start: 47439, Stop: 46753, Start Num: 3

Candidate Starts for Peterson\_74:

(Start: 3 @47439 has 27 MA's), (5, 47406), (7, 47322), (8, 47265), (9, 47223), (10, 47172), (11, 47163), (12, 47115), (15, 46992), (16, 46950), (19, 46764),

Gene: Petruccio\_75 Start: 45700, Stop: 45014, Start Num: 3

Candidate Starts for Petruccio\_75:

(Start: 3 @45700 has 27 MA's), (5, 45667), (7, 45583), (8, 45526), (9, 45484), (10, 45433), (11, 45424), (12, 45376), (13, 45334), (15, 45253), (16, 45211), (19, 45025),

Gene: PhrostyMug\_77 Start: 48272, Stop: 47586, Start Num: 3

Candidate Starts for PhrostyMug\_77:

(2, 48494), (Start: 3 @48272 has 27 MA's), (5, 48239), (7, 48155), (8, 48098), (9, 48056), (10, 48005), (11, 47996), (12, 47948), (15, 47825), (16, 47783), (19, 47597),

Gene: SarFire\_79 Start: 48509, Stop: 47823, Start Num: 3

Candidate Starts for SarFire\_79:

(Start: 3 @48509 has 27 MA's), (4, 48491), (5, 48476), (8, 48335), (9, 48293), (10, 48242), (11, 48233), (12, 48185), (15, 48062), (16, 48020), (19, 47834),

Gene: SkiPole\_84 Start: 47837, Stop: 47151, Start Num: 3

Candidate Starts for SkiPole\_84:

(Start: 3 @47837 has 27 MA's), (5, 47804), (7, 47720), (8, 47663), (9, 47621), (10, 47570), (11, 47561), (12, 47513), (15, 47390), (16, 47348), (19, 47162),

Gene: Smairt\_79 Start: 49288, Stop: 48602, Start Num: 3

Candidate Starts for Smairt\_79:

(2, 49510), (Start: 3 @49288 has 27 MA's), (5, 49255), (7, 49171), (8, 49114), (9, 49072), (10, 49021), (11, 49012), (12, 48964), (15, 48841), (16, 48799), (19, 48613),

Gene: Switzer\_74 Start: 46808, Stop: 46122, Start Num: 3

Candidate Starts for Switzer\_74:

(Start: 3 @46808 has 27 MA's), (5, 46775), (7, 46691), (8, 46634), (9, 46592), (10, 46541), (11, 46532), (12, 46484), (15, 46361), (16, 46319), (19, 46133),

Gene: Thor\_79 Start: 47867, Stop: 47181, Start Num: 3

Candidate Starts for Thor\_79:

(Start: 3 @47867 has 27 MA's), (4, 47849), (5, 47834), (8, 47693), (9, 47651), (10, 47600), (11, 47591), (12, 47543), (15, 47420), (16, 47378), (19, 47192),

Gene: Trouble\_75 Start: 46975, Stop: 46289, Start Num: 3

Candidate Starts for Trouble\_75:

(Start: 3 @46975 has 27 MA's), (5, 46942), (6, 46879), (7, 46858), (8, 46801), (9, 46759), (10, 46708), (11, 46699), (12, 46651), (15, 46528), (16, 46486), (19, 46300),

Gene: Turj99\_71 Start: 46466, Stop: 45780, Start Num: 3

Candidate Starts for Turj99\_71:

(Start: 3 @46466 has 27 MA's), (5, 46433), (7, 46349), (8, 46292), (9, 46250), (10, 46199), (11, 46190), (12, 46142), (15, 46019), (16, 45977), (19, 45791),